CHAPTER 1

INTRODUCTION

1.1 Background of Study

The difference housing property value in an urban area is said to be influenced by or dependent on the quantity and quality available in every location. The strategic residential area for example has many facilities such as distance to schools, city, petrol station can affect the property of the housing value. The distance to the city centre is the most important factor in differentiating the value of housing prices. There are several factors affects the market price of the property. One of the factors to be discussed is impacts of implementation bauxite mining to housing property value.

The study was made as a result of the pollution happen from bauxite mining in Kuantan. Human beings have used minerals almost ever since they existed. The ages of human developments have coincided with the use of minerals. The modern urban industrial economy cannot survive without minerals and metals, so we cannot wish away mining. Minerals can be described by various physical properties, which relate to their chemical structure and composition.

A mineral is an element or chemical compound that is normally glassy and that has been formed as a result of geological processes. They are several of mineral in our earth. Aluminium is one of the important mineral for human in modern day life which is spreading in Kuantan. In the last few years, Malaysia has become an exporting of bauxite to China. Malaysia is currently the leading countries in exporting the bauxite to China compared to Australia and Indonesia because of lower cost of the road transport compared to other countries. Bauxite has become important economic resources as the exportation in Malaysia.

However, the uncontrolled of bauxite mining has great potential in contribute the bad effects on the environmental, health and housing property value in that affected areas. In addition, bauxite mining may also impact negatively on the exterior of buildings or property as well as other side effects. As the issue of the bauxite contamination is a factor not be considered in the determination of housing prices, then a study should be done to see how far the relationship between the effects of the bauxite and the property of the housing value itself.

Bauxite is usually a soil or formation of rock that contained aluminium hydroxide minerals. From the perspectives of industrial, the Bayer process plant can be used to extract the alumina from bauxite. Mostly, Aluminium has been extracted from bauxite. This is due to Bauxite contained harmful metal such as Aluminium (Al), Copper (Cu), Magnesium (Mg), Sodium (Na), Zinc (Zn) and Arsenic (As) (Gow and Lozej, 1993).

According to Imani (2016), a laterite soil has formed bauxite as a rock that has been soluble from silica and other soluble materials in subtropical or a wet tropical condition. Besides, bauxite is a main ore of aluminium and most of the aluminium that commonly using in the industry is mainly extracted from the bauxite. The bauxite ore which is the aluminium hydroxide contained about 32-52 percent of bauxite residue. The higher concentration of bauxite will greatly affects the ecosystem, habitat and there are also harmful to human health.

The human health problems caused by the bauxite mining lead to affect the residents such as contracted with Alzheimer, breast cancer and autism disease resulting from immune cascade problem due to high toxicity of aluminium's presence. In other words, this study was to identify whether a buyer is considering the issue of bauxite in the area during the purchasing or the offer price for a residential property in the area.

Over exposure of aluminium hydroxide can effects human health for instance coughing, redness of the skin, following with peeling and itching eyes are the effect from exposure of bauxite dust. There are many problem also resulting pollution, bauxite mining can lead to the uncontrollable water pollution, air pollution, soil contamination and also lead to human health problems (Lad and Samant, 2015). Bauxite mining activities that occur affect water resources in the contaminated area as well as a

negative impact on groundwater and surface water. Bauxite mining and related activities such as blasting, removal of ore, the movement of heavy vehicles contributed to the adverse effects of small springs and streams that supply water to the main river and disrupt the flow rate of the river.

It can be observed through the turbidity in the rivers and streams, especially in the rainy season, are very high due to intense soil erosion. The impact of bauxite mining has led to the destruction of aquatic habitats, increased run-off and contamination of drinking water supplies. Problems such as increased runoff, degradation of aquatic habitat, sedimentation, erosion and increased concentration of chemicals constituents are the effects of surface mining (Rathore and Wright 1993).

Uncontrolled of bauxite mining activities can cause air pollution which gave negative impact on human health, aesthetic value, damage the structure of the building and changing weather conditions (Mohamad Rozainee, 1994). Furthermore, the polluted air will cause a negative impact on building materials and prevention is important to maintain a building (IFAWPCA Convention, 1983). This problem will involve high maintenance costs of the building or property involved in that contaminated area.

The main environmental issues are dust caused by the bauxite mining. Dust completely covers a very large area that affect residential areas, habitats and agricultural of the bauxite exploitation site. This dust consists of emissions of toxic chemicals added to natural radiation product which in the long term can contribute to the lung cancer for the residents in the contaminated surrounding area.

The research was conducted to investigate the relationship between bauxite and the property of the housing value. The purchase of housing property is a considerable investment for an individual. Each buyer will normally be concerned on the values and the benefits of houses and often hope that their homes can give more comfortable and safe all the times.